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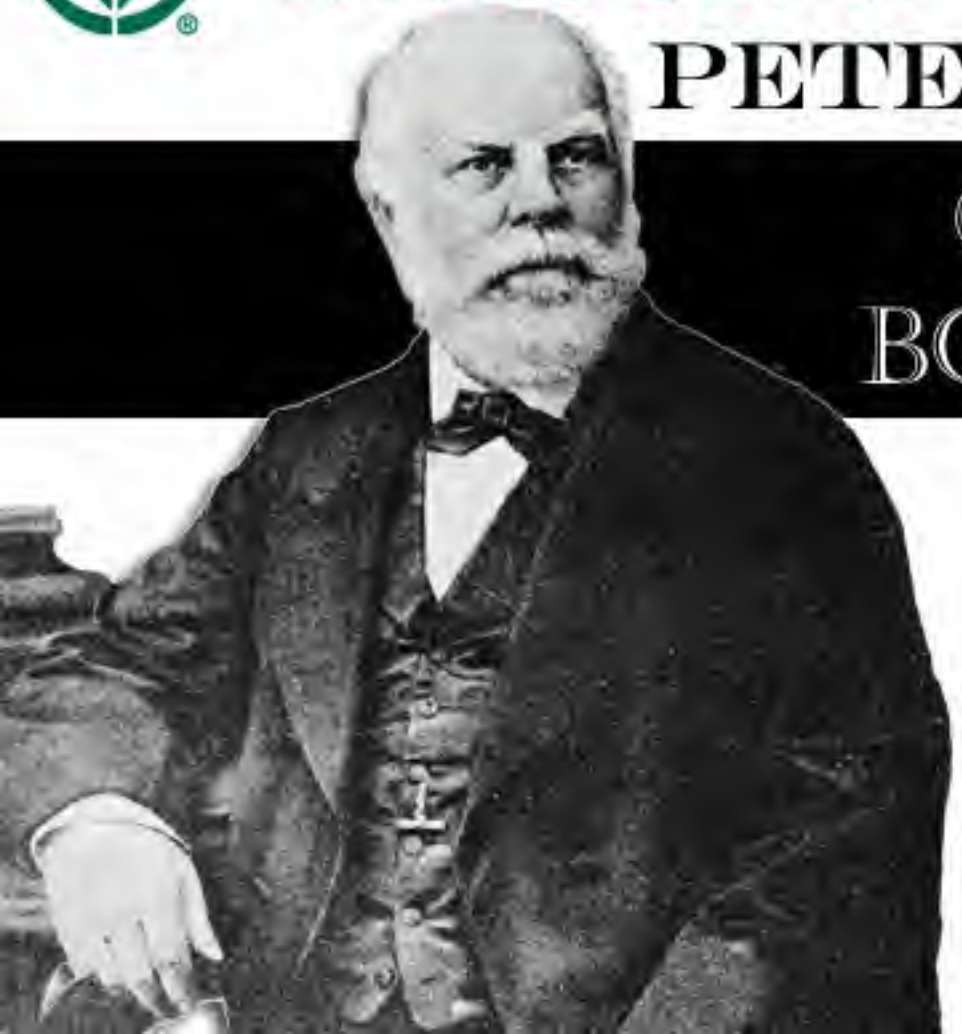

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cring.

Dimensions.—Length, 0.20 of an inch; width, 0.18.

The *Elæacrinus Kirkwoodensis* is nearly allied to *E.* (*Pentremites*) *melo*, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

4 74 - 81

cm 0 1 2 3 4 5 6 7 8 9 10
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MISSOURI BOTANICAL GARDEN

9463
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crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.

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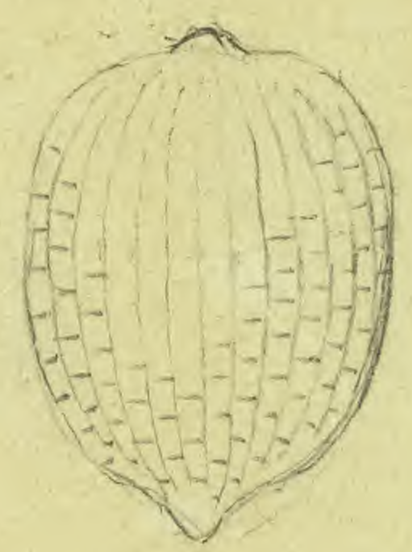
D. mitchellii

Jan 17 1866

Alabama Drummond

= Hb Gray



seed a little larger than usual

reticulate

stipules exclus. 3 nervis arcuatis int. divaricatis paulo longiora obtusa vix acuta mucronata.

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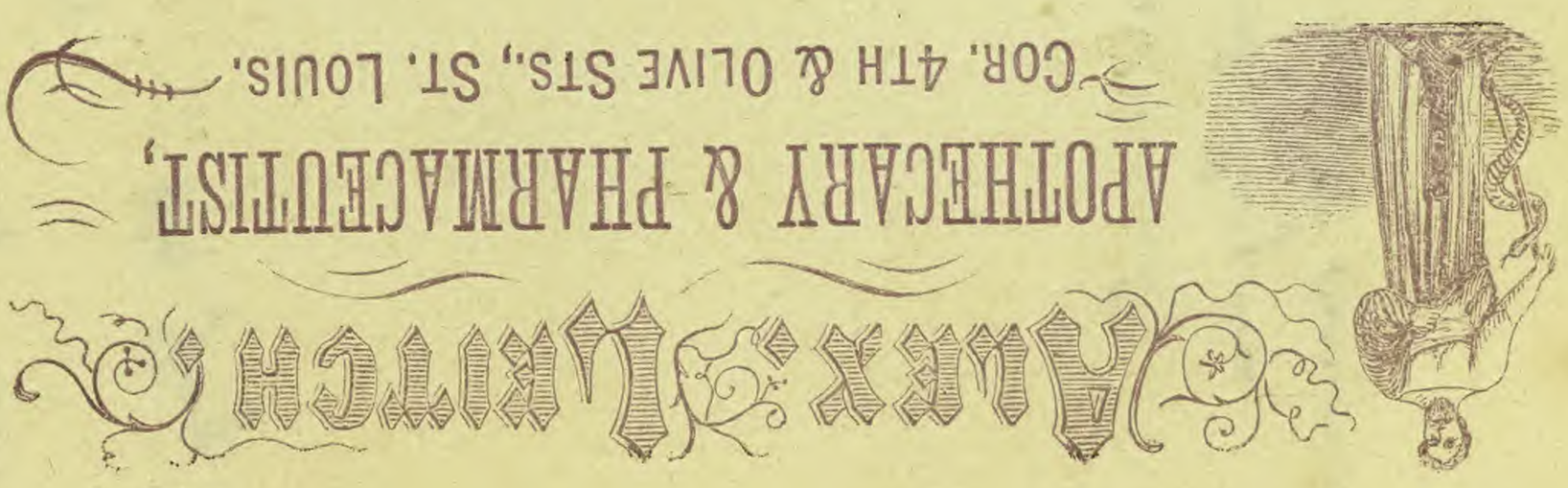

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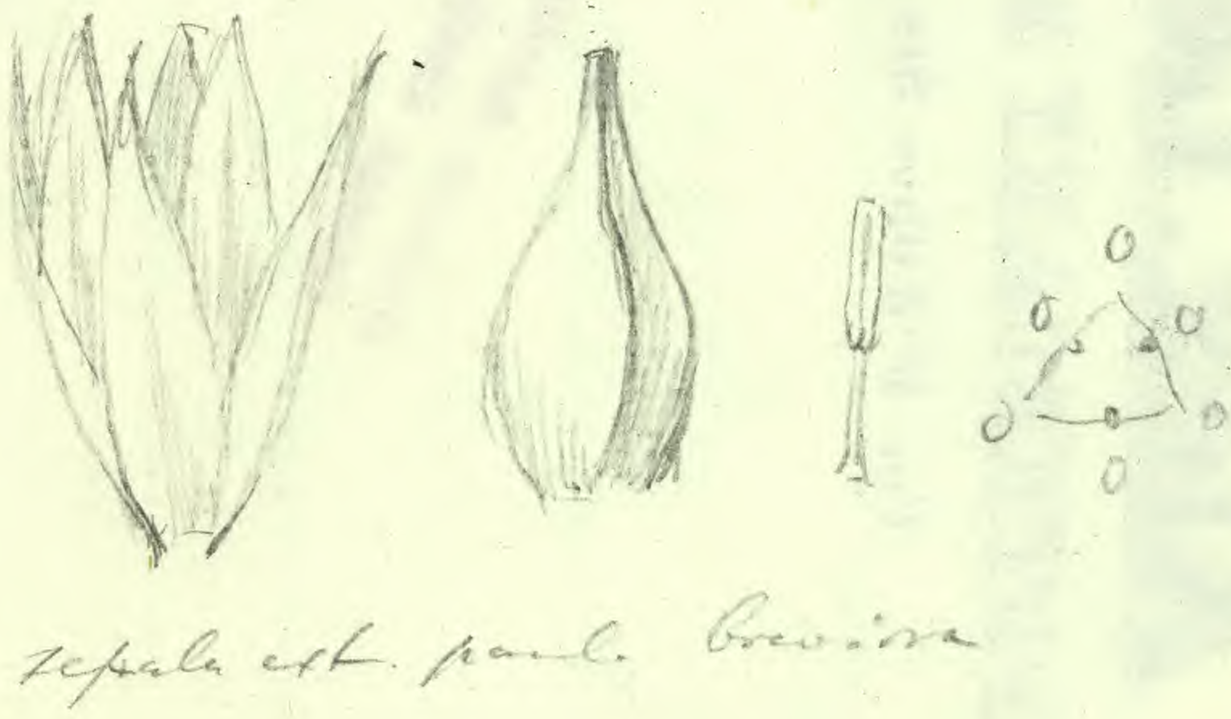
J. militaris

Apr 30 1866

Salisbury Md. A. Commons

heads 15–26 flowered

8–9 ribs visible



sepals ext. pan. brownish

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Lemna minor Aug 18 1865

Rhode Island

capsule 6–8 flow

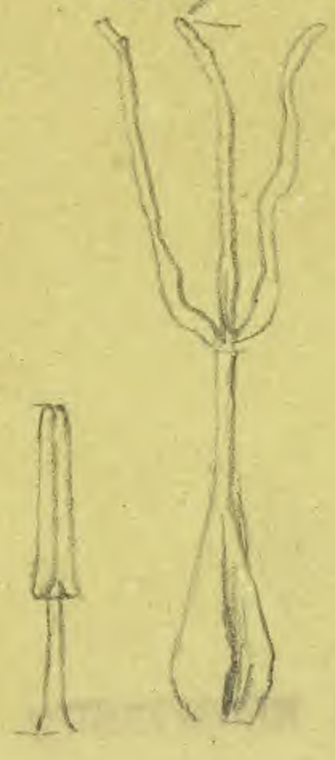
(= Maine spec. HG. Hall)

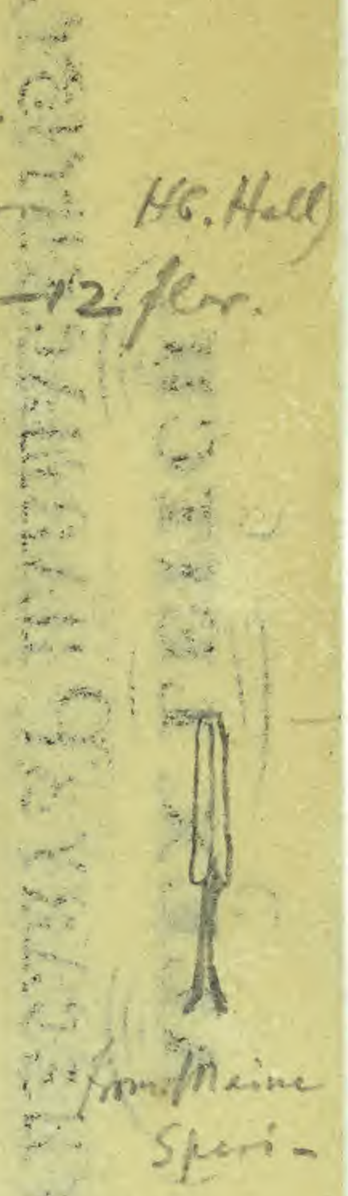
8–12 flor.

×60

×10

(unripe)





from Maine Speci-

pod as long or longer than ovate pointed lobes

outer ones sharper pointed but usually a little shorter than inner ones

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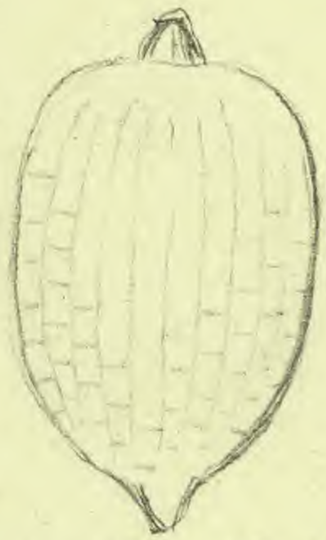
P. militaris Oct 7 1865

Moses' Lake Pocono Mountains Pa

Dr. T. Green

= H6 Grey

×60



orientalis

very light

×10

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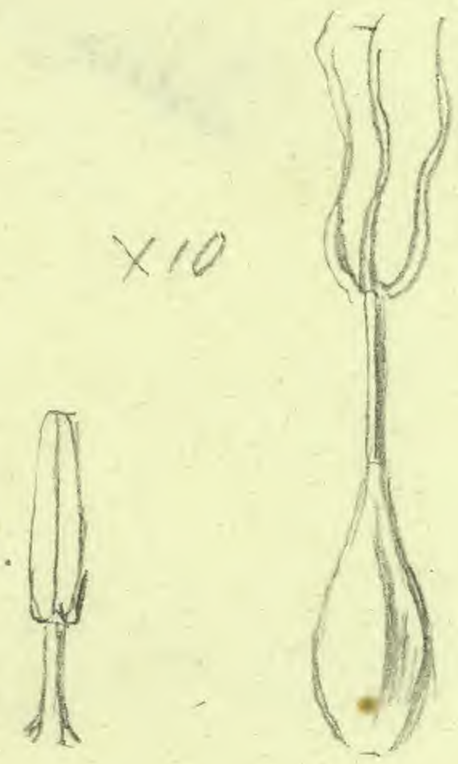
D. militaris Octo 7 1865

W. Chamberlain Lake

30 Miles north of Katahdin, Maine

HO Gray

×10



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8946
9468

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S. maculatus

H. Ohio Gray Engl
Ohio Thurber Thurber

Massachusetts Tuckerm
Greene

N Jersey Burlington Co. C. F. Parker. H Gray
?

Pennsylvania Torrey Botan Green (Green)
Darmd. (Dr)

Alabama

Maine Chamberlain Chamb
Blake

Salisbury Md md. Commons.

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b9h6

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Juncus militaris

sometimes without the basal leaf, and sometimes with only the upper sheaths, or with the first only — with one or the other leaf of the stem!

C. F. Parker: In shallow water extending to the border of deep running water, Delaware — the finest specimens 3-4 feet tall.

Montclair, N. J.

Swamps of N. J.

Maryland, Parker

Eugene L. Massot,

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PURE MEDICINES,

THE FINER CHEMICALS,

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0446

482-4

interrupted descent and ascent took place from January to December, we find in 1862 some interruptions in the steps of that ladder. The electricity in February, 1862, is about four degrees higher than that of January, April somewhat higher than March, and July is the lowest instead of September in 1861. These trifling irregularities may be accounted for by differences in temperature and relative humidity, and by a greater number of thunderstorms in 1862. January of 1862, for instance, was so unusually rainy, that its relative humidity too was unusually high, diminishing thus electricity. But the general features of distribution of electricity throughout the year are apparent in both years, and we may in that respect divide the twelve months of each year into two or three groups. Computing the months which give the highest electricity and those which give the lowest in each year, we find that in both years the months of January, February, March, April, November and December exhibit the highest, and the months of May, June, July, August, September and October the lowest electricity. The first group gives

The aggregate monthly mean of	71.5	degrees	of electricity	in 1861
and	74.6	"	"	" 1862
While the second group gives	29.0	"	"	" 1861
and	25.7	"	"	" 1862

The second group prevailed therefore in 1861, and the 1st

VI. The appearance of negative electricity was connected in

1861. No. times.	1862. No. times.	
30	32	with thunderstorms.
23	28	with rains without thunder and lightning.
20	4	with dry storms (without rain and without thunder and lightning).
4	3	with snow.
1	0	with fog.
78	67	

VII. *Relation of Rain and Snow to Electricity.*

Rain without thunderstorm was accompanied

	By Positive Electricity.		By Negative Electricity.		By no Electricity.	
	In 1861.	In 1862.	In 1861.	In 1862.	In 1861.	In 1862.
January.....	7	5	3	2	.....	2 .....
February	2	1	4	1	.....	.....

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1471

cm 0 1 2 3 4 5 6 7 8 9 10
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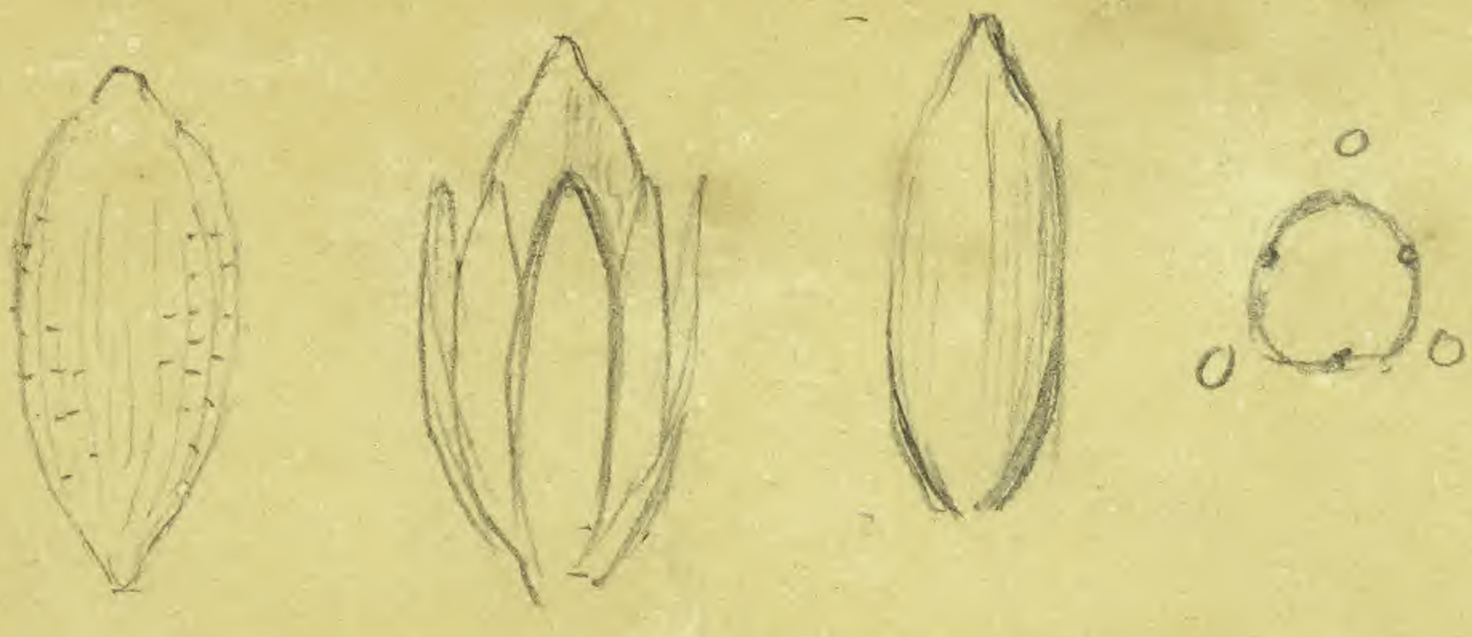
D. stapeliaeformis

Oct 14 1865

H6 H5 W1

Fruit a capsule cylindric elongate



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P. superiens Mkrmk

Octob 14 1865

Bonbofen 1828

Speier 1827

x 60

sepala interiora
petala longiora, obtusiuscula
exteriora mucronata acutis
capsula ovata mucronata

sepala equalibus capsula aequantibus

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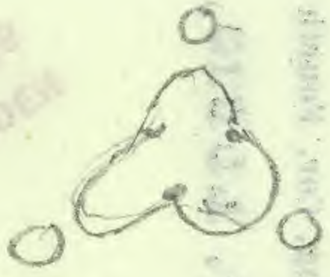
"Juncus uliginosus"
Edinburg

March 31 1866

8–9 ribs



×150
reticulation
not distinct.

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ise raga of pitchings, which, however, may be due to weathering.

Dimensions.—Length, 0.20 of an inch; width, 0.18.

The *Elæacrinus Kirkwoodensis* is nearly allied to *E.* (*Pentremites*) *melo*, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

4
Meek & Worthen
Geol. Surv. Ill.
456-509

cm 0 1 2 3 4 5 6 7 8 9 10
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as range of mountains, on Capt. Simpson's return trail. Circumstances prevented me from obtaining more than a few crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

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D. alpicum (Fernald)

	Ills. Phila.	Gray.	Eng. Cr.
Arctic Sea Coast	•	Drummond	(Drummond)
Seven Lakes		Sartwell	
Ontario Lake		Sartwell	Sartwell
Lake Superior		Loring	
Carlton House		Drummond	(D)
Rocky Mts		Drummond	(D)
Mackenzie River		Drummond	(D)
Fort Colville to Rocky Mts		Lyall	(L)
Colorado		Hall 558	558
Saskatchawan		Bourgeau	(B)
Ringwood Ill		Vasey	Vasey
Upper Platte		Hayden	
North Red River		Douglas	
Manitou Island			Englmann
Devil's Lake			Geyer
Fort Gratiot Mich	Pitcher		
Bank of Vermont			W.F. Mac...

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9 Lhb

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D. peloxanthus Mey.

meyer orgin l.

Sepalis obtusis

capsula triquetro-
ovata mucronata
sub cum corolla
brevissimis

Massachusetts

sectis diffusis ob
Camptocarpo geam
ab parodoxo ovato
cujus habitum refert.

Lobarpea &
Kunth.

spicis subbifloris
sepalis oblongis obtusis
intensis by paulo
longissimis
capsula triquetro-
ovata brevissimis

---

anthem filamento duplo
longiores
stylus elongatus

D. asperulatus L. s.
D. Camptocarpus
Kunth: Chth.
pedicellis 4-10 floris
sepalis aequalibus
ext. mucronulatis
int. obtusiusculis
capsula ovato-ob-
longa triangul
mucronata
brevibus.

D. fascicularis Schrk.
s. D. alpinus Vill

pedicellis 3-5 floris
Sepalis aequalibus rotundato-
obtusis
capsula ovato-oblonga
mucronata
brevissimis; extensoribus
sub capsula mucronatis

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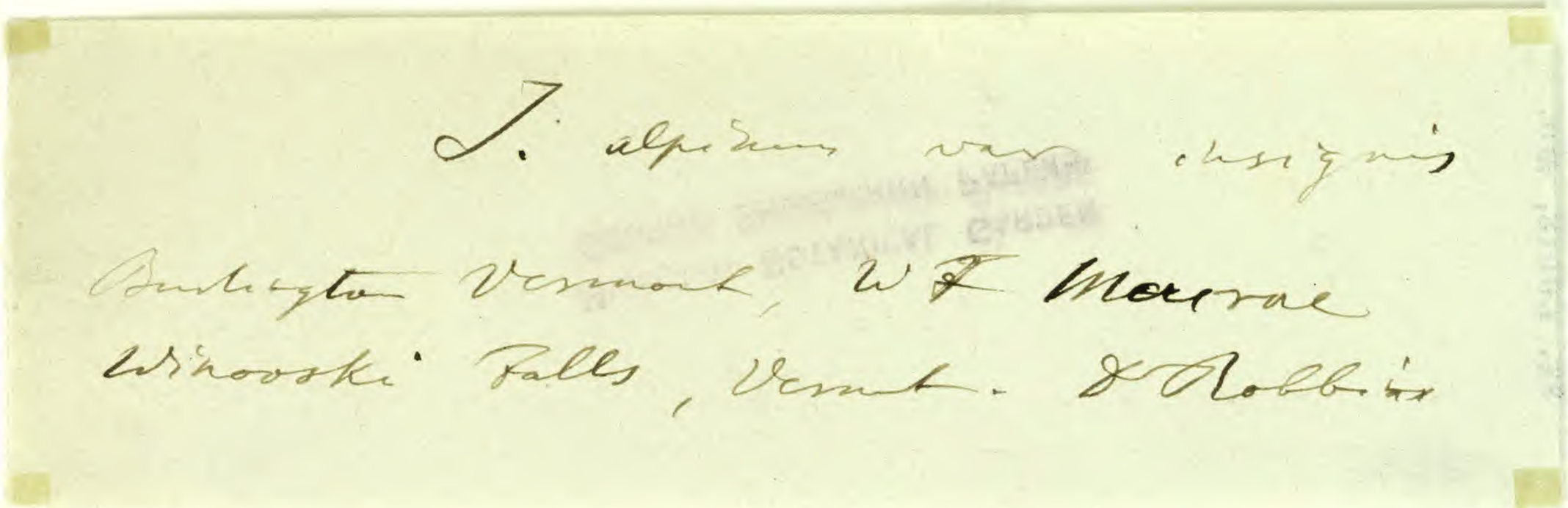
J. alpinum var. champlainense

Burlington Vermont, W. F. Monroe

Winooski Falls, Vermt. D. Robbins

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Hüsp. Nova Mexicana

Coll. Mex. - Texana

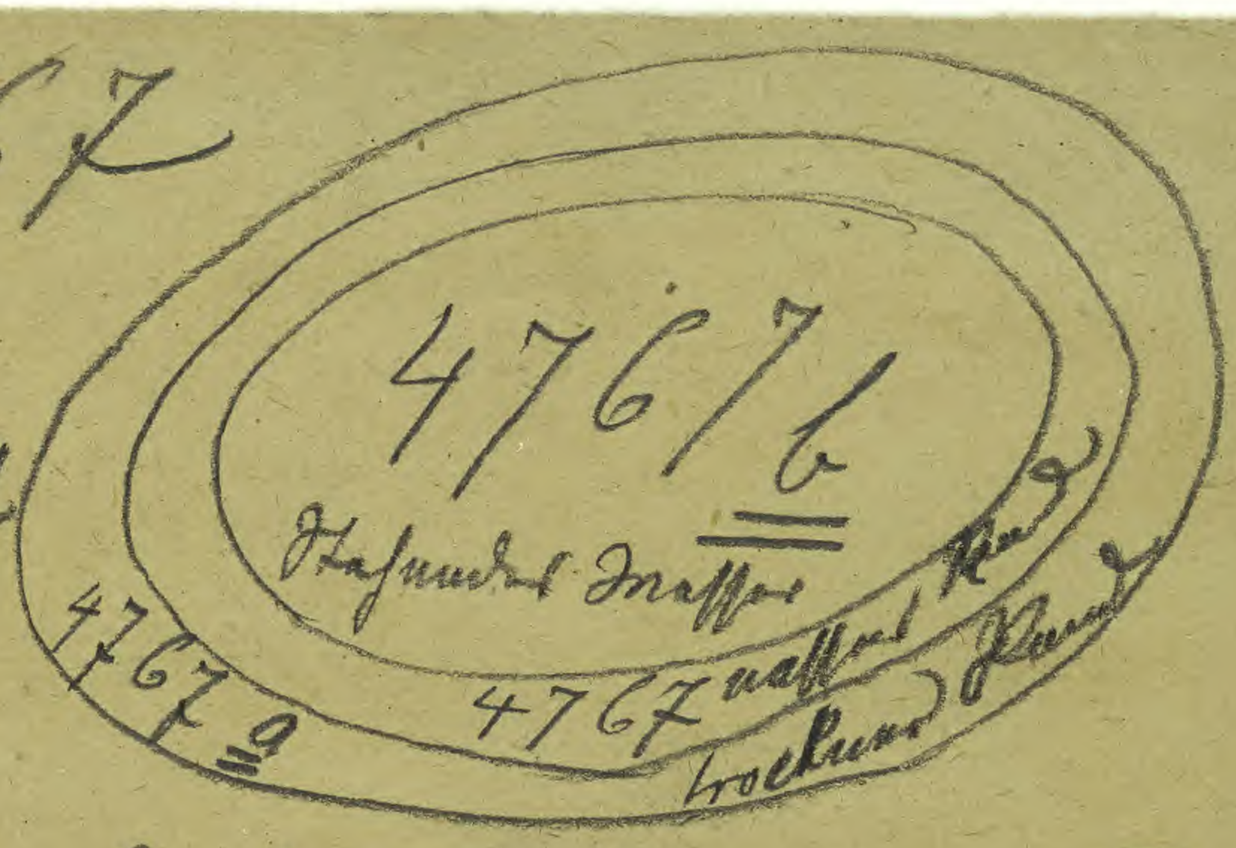
1846.

J. Gayana

Juncus effusus forma

H. Wolander 4767

4767 a Carissima



möchte ringsum auf dem
dunklen Rande ganz, da wo
weiss wird (Form 4767) blieb
die Lüftungsrinne bis 3, aber die
Blätter verlängern bis und Hülse
bis — Im eigentlichen Besonderen
Dreissig sind die Lüftungsrinne bis
wo ganz verschwunden und die
Blätter Hülsen bis in seine Fülle
die ganzen Dreissig oberflächig über
Zirkund — Später trocknet die Dreissig
ganz ab und wenn blasiert diese
Farben und werden ganz weiss —
grau — wenn Dreissig-Pflanze
äußerlich — Dass gewesen ist Drahs
Fortpflanzung in der

Over

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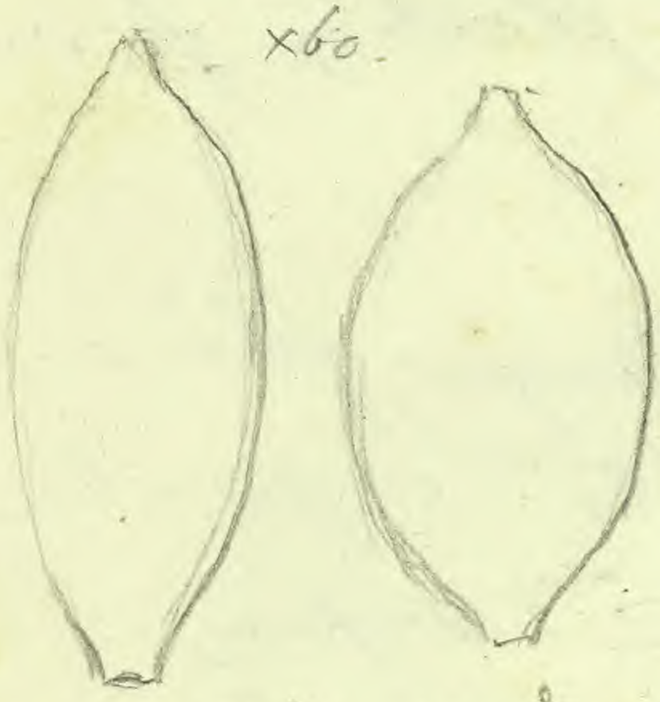
4767

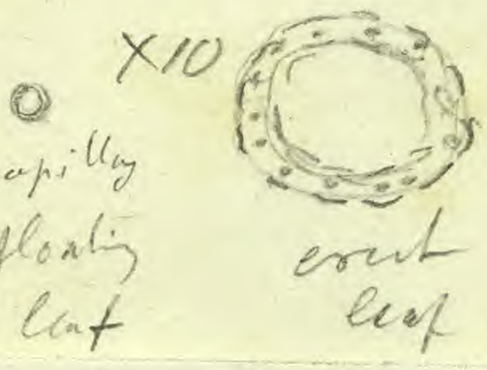
4767 Juncus supiniformis July 26 1867

Mendocino City May 1866 Bolander

Capitula 5-flo

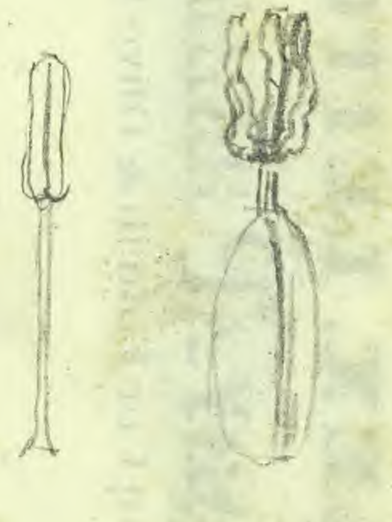


very unripe seeds
mostly of the elongated
form.



sepals irregular
several outer ones
short

capsule prismatic
angular - winged
a little exert or equal
to sepals.



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nearly allied to S. silphioides, Ait. 1788
(Sagittaria Mooreana 1777) 3 sepals 1 mm
petals 3 mm capsule + red beaks
Distinct from the floating form
distinguished by the larger flowers,
strongly ribbed
acute sepals, acute capsule
(not always obtuse = emarginate)
larger plants, larger seeds

Roem. &.
Juncus Richardsonianus Schult. Syst. veg. 7. p. 201
J. effusi A Brown in Richards append. Frankl
Journ p. 11

Hook Flor. Bor Am. 2. 191:
" foliis subulatis nodoso articulatis,
panicula pauciflora (3–5 flora)
capsulis ovatis calyce obtuso hexandro
longioribus " Brown.

= pilocarpus ? Hooker.

Doubtful Kunth 3. 361
D. D. Steudel 2. 308

all authors repeat A Brown's words —
none seem to know the plant

Hook. says: ~~perhaps~~ I am not acquainted with this plant
perhaps I have included it in scirpus (pilocarpus)

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